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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/813,647	03/07/97	HENDEL	A 082225.P2170

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EXAMINER

VU, T

ART UNIT PAPER NUMBER

2756

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DATE MAILED: 10/07/98

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action SummaryApplication No.
08/813,647Applicant(s)
Hendel et alExaminer
Thong VuGroup Art Unit
2756☒ Responsive to communication(s) filed on Jan 1, 1937☐ This action is **FINAL**.☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims☒ Claim(s) 1-37 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.☒ Claim(s) 1-37 is/are rejected.☐ Claim(s) _____ is/are objected to.☐ Claims _____ are subject to restriction or election requirement.**Application Papers**☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.☐ The drawing(s) filed on _____ is/are objected to by the Examiner.☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.☐ The specification is objected to by the Examiner.☒ The oath or declaration is objected to by the Examiner.**Priority under 35 U.S.C. § 119**☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.☐ received in Application No. (Series Code/Serial Number) _____.☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).**Attachment(s)**☒ Notice of References Cited, PTO-892☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____☐ Interview Summary, PTO-413☒ Notice of Draftsperson's Patent Drawing Review, PTO-948☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

Art Unit: 2756

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-37 are rejected under 35 U.S.C. § 102 [a] and [e] as being unpatentable over

Picazo Jr et al [5,805,816]

As per claim 1, Picazo et al disclose *a first device and a second device in a connecting the first device and the second device to a plurality of interfaces; and emulating a single high-speed interface with the plurality of interfaces* such as the computer connect to hub/bridge/router [fig 1] which has plurality of interfaces such as a plurality of fiber optic ports [col 6 line 61].

By this rationale claim 1 is rejected.

As per claim 2 Picazo disclose *selecting one of the plurality of interfaces to send a packet of data* by saying the function of the selected LAN interface 118 or 120 is to drive whatever physical media is used for the backbone port connection 124 to network two [col 10 line 61].

By this rationale claim 2 is rejected

As per claim 3 Picazo disclose *selecting one of the plurality of interfaces to send the packet of data comprises utilizing state information in the first device* by saying the main

Art Unit: 2756

microprocessor and the Ethernet processor coordinate to manage the utilization of storage locations in the shared memory [col 5 line 42]. By this rationale claim 3 is rejected

As per claim 4 Picazo disclose *selecting one of the plurality of interfaces to send the packet of data comprises utilizing address information in the packet of data* such as this reference count is used to aid in managing the memory usage of the receive buffer for maximum utilization, especially in situation where some ports have heavy traffic or bottlenecks and packets are piling up while other ports are able to transmit their packets without delay as soon as pointers thereto are placed in their transmit buffers.[col 39 line 64]. By this rationale claim 4 is rejected

As per claim 5 Picazo disclose *transmitting a first packet of data on only one of the plurality of interfaces* by saying the main processor writes a pointer to the packet into the transmit buffer of the LAN controller coupled to the media segment on which the packet is to be transmitted [col 5 line 34]. By this rationale claim 5 is rejected

As per claim 6 Picazo disclose *assigning a first identifier to a first interface and a second interface at the first device* such as The Ethernet processor 804 then assigns each particular LAN Controller Chip to a unique descriptor dedicated to supporting only that Lan Controller Chip; *and identifying a path between the first device to the second device with the first identifier* such as when the bridge is active, only traffic on bus which has a destination address identifying a machine connected to local area network 2 will get through to LAN 2. By this rationale claim 6 is rejected

Art Unit: 2756

As per claim 7 Picazo disclose *assigning a media access control (MAC) address* by saying when a management packet arrives at repeater port , the physical hardware and software examines the MAC address [col 21 line 15]. By this rationale claim 7 is rejected.

As per claim 8 Picazo disclose *assigning an Internet Protocol (IP) address* such as These protocols examine the data portion of the data link layer packet received from the port and derive the Destination Network Address and Destination Node IP addresses therein [col 21 line 25]. By this rationale claim 8 is rejected

As per claim 9 Picazo disclose *assigning a group identifier* such as If the packet is an internal hub management packet, then the test of block is performed to determine if the packet is group addressed. By this rationale claim 9 is rejected

AS per claim 10 Picazo disclose *the data traffic on the first interface and the second interface is approximately the same* by saying the hub with integrated bridge represents a significant advantage in that the presence of bridges and routers in complex, high volume networks provides segmentation of the network so as to maximize use of the media by allowing maximum traffic volume, i.e., volume at media rate, e.g., 10 megabits/second for Ethernet [col 7 line 20]. By this rationale claim 10 is rejected

As per claim 11 Picazo disclose *transmitting the data on the first interface when the output queue of the second interface is fuller than the output queue of the first interface and when previous data sent on the first interface is no longer on the first interface* by saying the Ethernet process monitors status bits set in the descriptor ring by the LAN controller chips that

Art Unit: 2756

indicate when a packet has been successfully received, and, when this event occurs, reads the pointer to the packet from the descriptor ring and transfers the pointer to a queue which is monitored by a main processor coupled to another port of the shared memory [col 5 line 19].

By this rationale claim 11 is rejected

Claims 12-29 have the same limitation as claims 1-11. By this rationale , claims 12-29 are rejected.

As per claims 30, 31, 36, 37 Picazo disclose *the first device is an endnode and the second device is a switch* [fig 1]. By this rationale claims 30, 31, 36, 37 are rejected

As per claim 32 Picazo disclose *a trunking pseudo driver, coupled to the first port and the second port, that allows the first interface and second interface to emulate a single high-speed device* such as the initialization routine in pseudocode which handle the traffic between the endnode and the bridge. [col 27 line 11]. By this rationale claim 32 is rejected

As per claim 33 Picazo disclose *a load balancing unit that selects one of the first and second interfaces to transmit a packet of data* such as Link state protocols can use multiple paths for failure recovery and load balancing of message traffic [col 17 line 65]. By this rationale claim 33 is rejected.

Claim 34 have the same limitation as claims 6 and 32. By this rationale , claim 34 is rejected.

As per claim 35 Picazo disclose the first and second interface are homogeneous such as Ethernet 10BaseT interface. [col 26 line 22]. By this rationale , claim 35 is rejected.

Art Unit: 2756

Conclusion

2. All claims are rejected.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Thong Vu, whose telephone number is (703)-305-4643. The examiner can normally be reached on Monday-Thursday from 6:30AM- 4:00PM. The examiner can also be reached on alternate Fridays during the same hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Frank Asta*, can be reached on (703) 305-3817 or via e-mail addressed to [*Frank.Asta@uspto.gov*]. The fax number for this Group is (703) 308-6606.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [*thong.vu@uspto.gov*].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Thong Vu
Sep 30, 1998


FRANK J. ASTA
SUPERVISORY PATENT EXAMINER
GROUP 2700